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PREVENTION OPPORTUNITIES UNDER THE BIG SKY

SEXUALLY TRANSMITTED INFECTIONS: Reported Cases Increased From 2000 to 2006

In the United States an estimated 19 million persons acquire a new sexually transmitted infection in each year.[1] Chlamydia trachomatis infections are the most commonly reported communicable disease, and gonorrhea the second most common in both the United States and Montana. The annual number of cases of chlamydia, gonorrhea, and syphilis reported in Montana increased from 2000 to 2006. This issue of *Montana Public Health* describes the cases of these infections reported, as well as prevention, treatment, and partner notification steps that need to be intensified.

Chlamydia Trachomatis Genital chlamydia infection is the most frequently reported sexually transmitted infection (STI) in Montana, and in all likelihood is under-reported. In 2006, 2649 cases were reported --an 80% increase from the 1468 cases reported in 2000. The female-to-male ratio of reported cases is 3 to 1, in large part due to active screening for this infection in young women. This screening is important because an estimated 75% of infected women do not have symptoms. Untreated women with chlamydia infection can develop pelvic inflammatory disease which can lead to infertility and chronic pelvic pain. Introduction of large-scale screening programs has been followed by marked reductions in screening positivity rates.[2] Selected characteristics of cases reported in Montana are shown in Table 1.

TABLE 1: Selected characteristics of reported cases of chlamydia, gonorrhea, and syphilis, Montana, 2000 and 2006

Characteristic of cases	Chlamydia		Gonorrhea		Syphilis	
	2000	2006	2000	2006	2000	2006
Number, total	1468	2649	60	191	0	7
% in women	75	73	63	64	-	0
% of cases 15-24 years of age	79	74	68	63	-	0
Race(rate*)						
White	390	854	10	50	-	0
Am Indian	3943	5284	166	294	-	0

*Per 100,000 in 15-24 age group

NOTE: The rate disparity between AI and White may be due, at least in part, to screening practices. Several health care settings that serve primarily AIs practice universal screening, whereas most health care settings conduct targeted screening for chlamydia and GC.

Gonorrhea and Syphilis The number of reported cases of gonorrhea in Montana dropped from 1026 in 1984 to 53 in 1999. However, from 2000 to 2006 the number of reported cases more than tripled. Selected characteristics of these cases are shown on Table 1. A striking increase in reported cases of syphilis occurred in 2006 (Table 1). The last case of congenital syphilis reported in Montana was in 1982.

MT DPHHS STD/HIV Program The DPHHS STD/HIV Program collaborates with local health care providers and health departments to prevent and reduce the burden of STIs and HIV infections in Montana. The goal is to increase awareness of STIs, HIV, and high risk behaviors associated with these infections; provide prevention and risk-reduction strategies, and to increase local access to STI and HIV screening, treatment and clinical services. The Program administers funding for statewide prevention, clinical services (including testing and treatment of clients) and conducts staff training. Considerable effort will be required to achieve the Healthy People 2010 National Goals for STIs in Montana (Table 2).

TABLE 2: Increases that must be reversed to achieve the Year 2010 Goals

Infection	Annual # Cases		Increase	Percent or rate, 2006	HP 2010 Goals
	2000	2006			
Chlamydia	1468	2649	80%	6.9%*	3.0%*
Gonorrhea	60	191	>200%	20.4**	19.0**
Syphilis	0	7	∞	0.8**	0.2**
HIV/AIDS	10	20	100%	23.2**	Decrease # new cases

*Percent "positivity" among Planned Parenthood population screened
**Per 100,000 population
∞: not possible to calculate % increase

Prevention of STIs While abstinence from sexual activity can prevent STIs, this strategy has not been successful as a population–based prevention method.[3] Those who choose to be sexually active should limit their number of sexual partners (e.g., practice sustained monogamy) and must have access to condoms and be taught how to use them.
When a case of STI is identified, recent sexual partner(s) of the case should be referred to a health care provider and/or the local health department. Counseling and appropriate diagnosis and treatment of both cases and partners are essential steps in prevention and control of STIs.

Treatment of STIs The 2006 STD Treatment Guidelines from the Centers for Disease Control and Prevention (CDC) can be reviewed at the CDC web site.[4] These guidelines provide treatment advice not only for STIs that are reportable in Montana, but also for a variety of additional diseases that are spread primarily through sexual activity. Important advice related to special populations, e.g., pregnant women, and special situations, e.g., sexual assault, are also included. Highlights of these case management and treatment guidelines appear in the Recommendations box (below).

Benefits of Prevention Effective prevention strategies can decrease the physical and psychological consequences of STIs. In addition, these strategies can decrease the extraordinary medical costs (estimated $14.7 billion per year) related to these diseases.

Recommendations: Selected Case Management Reminders from the 2006 CDC STD Treatment Guidelines[4]

1. Chlamydia

- All index patients (individuals who have a positive chlamydia lab test) should be screened for GC, syphilis and HIV.
- All reported partners should be screened for chlamydia prior to treatment.
- Preferred treatment for chlamydia cervicitis and urethritis (uncomplicated infection) is 1 gram of Azythromycin PO, DOT (directly observed treatment) administered by a health care professional.

2. Gonorrhea

- All index patients should be screened for chlamydia, syphilis and HIV.
- All reported partners should be screened for chlamydia and GC, and treated for both chlamydia and GC unless chlamydia infection has been ruled out (negative screening test).
- Because of widespread quinolone-resistant GC, Ceftriaxone 125mg IM should be used as first-line treatment.
- In settings where results of GC cultures and sensitivities can be readily obtained AND patients can be reliably contacted, oral treatment per CDC 2006 Guidelines may be considered as second-line treatment.

3. Syphilis

- Timely identification, reporting and management of syphilis infections are critical steps in achieving effective disease control.

For more information, contact your local health department or Laurie Kops at the DPHHS STD/HIV Program,406-444-2457, **lkops@mt.gov**.

References:

1. Weinstock H, et al. Sexually transmitted diseases among American youth; incidence and prevalence estimates, 2000. Perspectives on Sexual and Reproductive Health 2004, 36:6-10.
2. CDC. Screening tests to detect Chlamydia trachomatis and Neisseria gonorrhoeae infections—2002. MMWR 2002; 51(No.RR-15): 1-48.
3. Santelli JS, et al. Explaining recent declines in adolescent pregnancy in the United States: the contribution of abstinence and improved contraceptive use. AJPH 2007; 97: 150-156.
4. CDC. 2006 CDC guidelines for treatment of sexually transmitted diseases. http://www.cdc.gov/std/treatment

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